

<b>DATA ITEM DESCRIPTION</b>			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
<b>1. TITLE</b>  Failure Analysis and Corrective Action Report			<b>2. IDENTIFICATION NUMBER</b>  DI-RELI- 81315 (T)	
<b>3. DESCRIPTION/PURPOSE</b> 3.1 Provides immediate reporting of failure and subsequent details failure analysis results and corrective action recommendation.				
<b>4. APPROVAL DATE</b> (YYMMDD) 930125	<b>5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)</b> G/Y224	<b>6a. DTIC APPLICABLE</b>	<b>6b. GIDEP APPLICABLE</b>	
<b>7. APPLICATION/INTERRELATIONSHIP</b> 7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data resulting from the work task as described by MIL-STD-781D and MIL-STD-785B.  7.2 This DID supersedes DI-R-5299C.				
<b>8. APPROVAL LIMITATION</b>		<b>9a. APPLICABLE FORMS</b>	<b>9b. AMSC NUMBER</b>  G6891	
<b>10. PREPARATION INSTRUCTIONS</b> 10.1 <u>Reference documents.</u> The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.  10.2 <del>Content.</del> The report shall contain the following: <div style="margin-left: 20px;"> a. Failure Analysis Report Number. (See 10.5)  b. Contract number.  c. Equipment title.  d. Equipment serial number.  e. Date of failure.  f. Test failed.  g. <del>Effect on equipment.</del> </div>				
(Continue on Page 2)				
<b>11. DISTRIBUTION STATEMENT</b>  <b>DISTRIBUTION STATEMENT A:</b> Approved for public release; distribution is unlimited.				

10. PREPARATION INSTRUCTIONS (Continued)

h. Total test time at failure.

10.3 Preliminary Report. Content and format shall be as follows:

10.3.1 Content.

- ~~a. Originator of the report.~~
- ~~b. Date of the failure.~~
- ~~c. Date of the report.~~
- ~~d. Contractor's name.~~
- ~~e. Failure Analysis Report Number. (See 10.5)~~
- ~~f. Contract number.~~
- ~~g. Equipment, title, part number, and serial number.~~
- ~~h. Assembly title, part number, and serial number.~~
- ~~i. Subassembly title, element or module title, part number, and serial number.~~
- ~~j. Part name, part number, serial number, date code, and manufacturer.~~
- ~~k. Name and specification of test failed.~~
- ~~l. Elapsed time and phase of test failed.~~
- ~~m. Total operation time of unit at time of failure.~~
- n. Failure symptoms.
- ~~o. Failure mode.~~
- ~~p. Classification failure (independent or dependent).~~
- ~~q. Type of failure from Failure Keyword List. (See 10.7)~~
- ~~r. Disposition of failed item.~~
- s. Any supplemental information relating to the failure (i.e., any internal contractor assessments, records, reports, correspondence, etc.).

10.3.2 Format. ~~The report may be handwritten and legible.~~

## 10. PREPARATION INSTRUCTIONS (Continued)

10.4 Final Report

10.4.1 Content. The final report shall contain the items required in the Preliminary Report and the following additional items shall be included:

- a. Reference-Failure Analysis Report Number (see 10.5)
- b. Failure Analysis methods.
- c. Failure Analysis results.
- d. Statement as to whether this is a pattern failure. If it is, the reports of the other failure(s) will be referenced.
- e. Corrective action:
  - (1) Action on individual equipment failure.
  - (2) Measures to prevent other failures.

10.4.2 Format. The same format may be used for both Preliminary report and Final report.

10.5 Failure Analysis Number

- a. Format. In accordance with the format code: X - N - T - F1 - F2
- (1). X is the equipment type number.
  - (2). N is the sequential failure number.
  - (3). T is the test phase in which the failure occurred.
    - (a) T=A for acceptance test.
    - (b) T=B for subassembly test.
    - (c) T=C for receiving inspection.
    - (d) T=D for reliability test.
    - (e) T=E for qualification test.
    - (f) T=F for system/equipment burn-in.
    - (g) T=G for system integration.
  - (4). F1 is the total number of failures of the same part number (i.e., resistor, capacitor, inductor, transistor, etc.) manufactured by the same vendor.

10. PREPARATION INSTRUCTIONS (Continued)

~~(5). F2 is the total number of occurrences of a specified failure mechanism of the same part number manufactured by the same vendor.~~

~~10.6 Nonrelevant and Unverified Failures. Nonrelevant and unverified failures shall not have the F1 and F2 numbers assigned because these types of failures do not relate to a part type failure. Instead, these failures shall be coded as "NR" for a nonrelevant failure and "UY" for an unverified failure.~~

10.7 Failure Keyword List.

10.7.1 Content. The content shall include:

- (1) Workmanship.
- (2) Handling.
- (3). Process.
- (4). Design.
- (5). Marking.
- (6). Test Equipment.
- (7). Contamination.
- (8). Open Bond Wire.
- (9). Electrical Short.
- (10). Electrical Open.
- (11). Software.
- (12). Mechanical.
- (13). Nonrelevant.
- (14). Under Investigation.
- (15). Unknown.
- (16). Unverified.
- (17). Glitch.
- (18). Testing Error.
- ~~(19). Tolerance.~~

**CDRL A006  
DI-RELI-81315 (T)  
ATTACHMENT**

**TEST INCIDENT REPORT AND FAILURE  
ANALYSIS AND CORRECTIVE ACTION  
REPORT DATA**

**01 MAY 2002**

Date File Sample for Corrective Action:

10 04102789413      atirs@atc.army.mil      etc etc<cr><lf>

--0<cr><lf>

DA-150 /02<cr><lf>

--3<cr><lf>

9-ZZ-999-999-999<cr><lf>

--4<cr><lf>

K2-B000001<cr><lf>

K2-B000010<cr><lf>

etc.

Repeating Block Sample

//<cr><lf>

--3<cr><lf>

8-ZZ-999-999-999<cr><lf>

--4<cr><lf>

K2-A000001<cr><lf>

K2-A000010<cr><lf>

etc.

Repeating Block Sample

//<cr><lf>

--100<cr><lf>

Closed<cr><lf>

--101<cr><lf>

930192<cr><lf>

--102<cr><lf>

931292<cr><lf>

--103<cr><lf>

930125<cr><lf>

--104<cr><lf>

930225<cr><lf>

--105<cr><lf>

920625<cr><lf>

--120<cr><lf>

It has been determined by the Developer that the shut down of<cr><lf>  
the engine occurred due to an electrical short.<cr><lf>

//<cr><lf>

--121<cr><lf>

This describes the status of the corrective action.<cr><lf>

//<cr><lf>

--122<cr><lf>

This area describes the results of the corrective action. <cr><lf>

//<cr><lf>

123 <cr><lf>

This area describes the planned production implementation. <cr><lf>

//<cr><lf>

-9<cr><lf>

#### 4. FILLING IN SECTION VI OF DA FORM XXXX-E.

Specific instructions follow for completing each area or section of DA Form XXXX-E.

**BLOCK 100: CA Status:** (Cols. 7-16, X(10) max)

Enter OPEN, PROPOSED, VERIFIED, REVIEWED, COMPLETED, INCOMPLETE, or NOT REQD indicating the status of the corrective action. This is a "MUST FILL" block.

**BLOCK 101: CA Entry Date:** (Cols. 33-52, X(20) max)

Enter the date (in DD MMM YYYY format) that the CA data is released for submittal. If the CA data is revised, the entry date changes with each new release and submission. A revision number is assigned for each revision. This is a "MUST FILL" block. Example follows:

Original CA data: 04 OCT 1993

Revised CA data: 06 OCT 1993 REV# 01

**BLOCK 102: CA Date Reviewed:** (Cols. 59-69, X(11) max)

Enter the date (in DD MMM YYYY format) that the corrective action review team reviewed the CA and verified it as appropriate and effective. Review may be by correspondence or electronic media (telephone, teleconference, e-mail, facsimile). This date is entered when complete concurrence has been obtained (to include resolution of elevated issues). If review was by correspondence or electronic media, then use the date when final coordination was achieved. Block 100 would be annotated REVIEWED. This is a "MUST FILL" block if the corrective action review team verifies the CA.

**BLOCK 103: CA Date Proposed:** (Cols. 7-17, X(11) max)

Enter the date (in DD MMM YYYY format) that the program manager submits a satisfactory acceptable CA. Once entered it will not change unless an error

was made. Block 100 would be annotated PROPOSED. This is a "MUST FILL" block if a CA is proposed.

**BLOCK 104: CA Date Verified:** (Cols. 33-43, X (11) max)

Enter the date (in DD MMM YYYY format) that test or analysis verified the corrective action as adequate. Block 100 would be annotated VERIFIED. This is a "MUST FILL" block when the corrective action is verified as adequate.

**BLOCK 105: CA Date Completed:** (Cols. 59-69, X (11) max)

Enter the date (in DD MMM YYYY format) that the CA was approved for production and no further actions are required. This block is not a required entry for a CA Status of NOT REQD. This is a "MUST FILL" block if Block 100 contains COMPLETED.

**BLOCKS 120 to 123.** (Cols. 2-77, X(76) max)

Space is provided for entering four different types of narratives that pertain to the corrective action. The four narrative types, together with their respective block numbers, are as follows:

- 120. Developer's Analysis of Problem.
- 121. Status/Description of Corrective Action.
- 122. Test Results on Corrective Action.
- 123. Planned Production Implementation.

Enter the block number and the title for the type of narrative that is being addressed; then prepare and enter the narrative. The use of upper-case and lower-case letters is permitted and encouraged. Use complete sentences and proper paragraph structuring, numbering, and indentation. Enter table headings and values as required to amplify the narrative. Use footnotes, if applicable. If desired, skip lines to separate paragraphs, space tables and table headings, and isolate footnotes.

Use as many lines as are necessary for each narrative type. Complete one narrative and add a line of dashes before beginning another narrative. Complete the narrative before continuing on to another block. Keep the narratives in order by block number. Each of the narratives are "MUST FILL" blocks.

Limit the narratives to the corrective action and related incident reports. Reference any hard-copy reports, sketches, photographs, or correspondence containing classified information that are being forwarded



separately. Do not include any classified information in the narratives or, for that matter, in any other blocks.

Revise or update the narratives as more information becomes available. Identify revised information with the heading on a separate line: "Revision" and the date of the revision. All original narrative data are retained during Corrective Action revision to ensure data integrity. Revisions may (1) add data or (2) change erroneous data by the citing the old and adding the correction